



(19)

(11) Publication number: **200**

Generated Document.

PATENT ABSTRACTS OF JAPAN

(21) Application number: **11192469**

(51) Intl. Cl.: **G11B 5/31 G11B 5/02 G11B**

(22) Application date: **07.07.99**

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| (30) Priority: | (71) Applicant: NEC CORP |
| (43) Date of application publication: 26.01.01 | (72) Inventor: ISHI TSUTOMU |
| (84) Designated contracting states: | (74) Representative: |

(54)

**MAGNETORESISTANCE
EFFECT COMPOSITE
HEAD, MAGNETIC
MEMORY DEVICE
EMPLOYING THE SAME,
AND MANUFACTURE OF
MAGNETORESISTANCE
EFFECT COMPOSITE HEAD**

(57) Abstract:

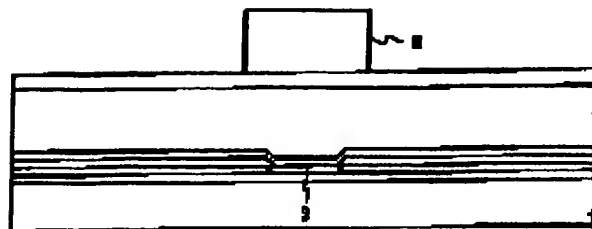
PROBLEM TO BE SOLVED: To obtain a magnetoresistance effect composite head which can pre scribe a narrow magnetic pole with a writing width of not wider than 0.5 μm with a necessary and sufficient machining dimension tolerance.

SOLUTION: The magnetoresistance effect composite head comprises a magnetoresistance effect element 3 consisting of a spin valve element, an electrode part 5 adjacent to the element 3 and supplying a sensing current and 1st and 2nd magnetic shields 1 and 6 which hold the element 3 and the electrode part 5

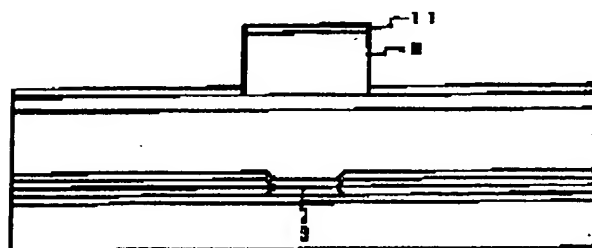
between them with reading gaps 2a and 2b therebetween. The 2nd magnetic shield 6 is used as a 1st magnetic pole, and a writing magnetic pole 7, a coil (9), coil insulation parts (10a) and (10b), a 2nd magnetic pole 8 and a protective film 11 are formed on the 2nd magnetic shield 6 to compose an inductive head.

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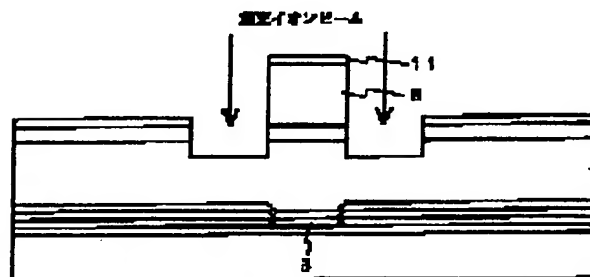
(a)



(b)



(c)



(d)

